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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/884,925

06/21/2001

Jack Chen

320528153US

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7590

04/24/2008

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EXAMINER

VILLECCO, JOHN M

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

04/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/884,925	Applicant(s) CHEN ET AL.	
	Examiner JOHN M. VILLECCO	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-21 and 28-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-21 and 28-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 7, 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed March 7, 2008 have been fully considered but they are not persuasive. Regarding applicant's arguments that Hashimoto fails to generate the multimedia file in response to a voice command, the Examiner agrees. It is the combination of Hashimoto and Oliver that disclose this feature. In particular, Oliver teaches sending the image in response to a send command, while Hashimoto discloses generating a multimedia file before sending the image. Thus, the combination would teach generating the multimedia file in response to the send command.

3. Additionally, applicant argues that the Hashimoto reference contradicts the Oliver reference since the voice and image files in Oliver are separate files. This argument is not convincing since the image files in Hashimoto are also separate until they are sent out from the camera. See Figure 12. Thus, the Examiner believes that the Hashimoto reference does not contradict the Oliver reference.

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4. Furthermore, applicant argues that the image and sound data in Hashimoto are captured simultaneously, which is contrary to the newly amended claims. Again the Examiner agrees with this assertion. However, Oliver discloses this limitation. See col. 5, line 43 to col. 6, line 17. Hashimoto was used merely to disclose the creation of a multimedia data file upon transfer out of an imaging device. Since, Oliver discloses transferring image data out of the imaging device using a voice command, one of ordinary skill in the art would have found it obvious to transfer the image data and associated annotation data out in a manner similar to Hashimoto. In addition, this amendment appears to introduce new matter. See the new grounds of rejection on the following pages.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-21 and 28-41 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, independent claims 15 and 35 recite some variation of the limitation of capturing the sound signal non-contemporaneously with the image signal and independent claims 28 and 40 recites some variation of the limitation of the sound data being received separately from the image data. These limitations constitute new matter and are

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rejected as such. There is no disclosure in the specification of such a feature. Contrary to the claim language, it appears that applicant's disclosure even contradicts this limitations. On page 5, lines 12-16 of applicant's specification, applicant states:

“While a user is operating the digital image scanner to pick up an image of an object, a voice can be added by the sound pickup device 12. For example, when a picture is scanned to produce an electronic picture file, aside can be added from the microphone 121 to tell the story of the picture”.

Thus, the newly amended claims constitute new matter. See MPEP § 2163.06 for a discussion of new matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 15-17, 19, 28-31, 34-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604).**

8. Regarding *claim 15*, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for transforming the image signal into a first analog signal, a sound pickup component (voice pickup, 102) for capturing a sound signal (col. 5, lines 44-47) and a voice command (col. 5, lines 7-43), a second analog-digital converter (A/D converter, 104)

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connected to the sound pickup component (voice pickup, 102) for converting the second analog signal to a second digital signal, and a processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the second digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command.

Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines 47-60 and column 5, line 1 to column 6, line 30. Although, Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention were implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal. In addition, Oliver discloses that the sound signal is received non-contemporaneously with the image signal since it is captured after the document is scanned (col. 5, lines 44-48).

Oliver, however, fails to specifically disclose that the processor produces a multimedia data file comprising image and sound information in response to the voice control command. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating

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one file for transfer, the image and audio data will always be associated with each other at the destination location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other at the destination location.

9. As for **claim 16**, Hashimoto discloses the use of a lens (7) for focusing the image signal and a photoelectric converting element (CCD, 9) for sensing the focusing image signal to generate a first analog signal.

10. With regard to **claim 17**, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.

11. Regarding **claim 19**, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller.

12. As for **claim 28**, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for generating a digital signal of an object, and a sound pickup device (voice pickup, 102) and A/D converter (104) for generating a sound digital signal (col. 5,

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lines 44-47) and a voice signal (col. 5, lines 7-43) capable of being used in a voice recognition routine. In addition, Oliver discloses a processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the sound digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command.

Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines 47-60 and column 5, line 1 to column 6, line 30. Although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention were implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal. In addition, Oliver discloses that the sound signal is received separately from the image signal since it is captured after the document is scanned (col. 5, lines 44-48).

Oliver, however, fails to explicitly disclose the use of a multiplexer and processor for generating a multimedia data file. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to multiplex image and sound data and to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses an image pickup device (photographing portion, 6) for generating a image digital signal of an object, a sound pickup device (microphone, 1 and A/D converter, 4) for generating a sound digital signal, a multiplexer and a processor (CPU, 23 and FIFO circuit, 23) for combining the digital image and sound signals and producing a single file for transmission to the external device. Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer

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of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating one file for transfer, the image and audio data will always be associated with each other at the destination location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other and the destination location.

13. With regard to **claim 29**, Oliver discloses that the image pickup component (image pickup, 112) receives an image signal and inherently converts it to an analog signal.

Furthermore, although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention were implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal. Additionally, Oliver discloses the use of an A/D converter (104) for converting the sound data to a digital signal.

14. Regarding **claim 30**, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of

Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller. Additionally, Hashimoto discloses that cameras typically include a lens (7) and photoelectric converting element (CCD, 9).

15. As for **claim 31**, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.

16. With regard to **claim 34**, as mentioned above in the discussion of claim 28, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. While both Oliver and Hashimoto disclose the use of a controller (106) and CPU (23), respectively, neither of the aforementioned reference specifically discloses that the processor produces the multimedia file via a multitasking operation. Official Notice is taken as to the fact that it is well known in the art that CPU's commonly perform applications or operations via a multitasking function. Multitasking operations allow for multiple tasks to be carried out virtually simultaneously by sharing the CPU time per application. Therefore, it would have been obvious to enable the CPU or microprocessor of the camera of Hashimoto or Oliver to generate the multimedia data file via a multitasking operation so that the CPU can carry out more than one operation at a time.

17. **Claim 35** is considered a method claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.

18. **Claim 36** is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.

19. **Claim 37** is considered a method claim corresponding to claim 17. Please see the discussion of claim 17 on the preceding pages.

20. As for *claim 39*, which depends upon claim 35, an image sensor can be considered a scanning device. Additionally, Oliver specifically discloses that his invention can be implemented in a scanning device.

21. *Claim 40* is considered a means plus function claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.

22. *Claim 41* is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.

23. **Claims 18, 32, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Maxium Technologies (Internet Publication, 2000).**

24. Regarding *claims 18, 32, and 38*, as mentioned above in the discussion of claim 16 and 35, respectively, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. However, the combination of the aforementioned references fails to explicitly state that the image sensor is a CIS. The Maxium Technologies Publication on the other hand, discloses that the use of contact image sensors (CIS) is well known in the art. The integration of CIS image sensors reduces the space needed for other components allowing for thinner and lighter products. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CIS image sensor instead of the CCD image sensor in Hashimoto or Oliver so that the camera is made smaller and lighter.

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25. **Claims 20, 21, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Haranishi (U.S. Patent No. 5,764,779).**

26. Regarding *claims 20 and 33*, as mentioned above in the discussion of claim 15, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. The aforementioned reference, however, fail to explicitly state that the microphone includes a filter for filtering off a noise signal from the analog signal. Haranishi, on the other hand, discloses that it is well known in the art to provide filters in a microphone for filter off noise. More specifically, Haranishi discloses a bandpass filter (2) for filter out noise from a microphone (1) and allowing only desired frequencies to pass. This feature allows for the microphone to only allow frequencies of the human voice to pass, thus increasing the quality of the signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a filter in the microphone of Hashimoto or Oliver so that a higher quality sound signal is generated.

27. As for *claim 21*, Haranishi discloses only allowing frequencies of the human voice to pass through the bandpass filter (2). See the abstract.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. VILLECCO whose telephone number is (571)272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN M. VILLECCO/
Primary Examiner, Art Unit 2622
April 22, 2008